Title (en)

CLOSED LOOP FEEDBACK CONTROL OF MOTOR VELOCITY OF A SURGICAL STAPLING AND CUTTING INSTRUMENT BASED ON MEASURED TIME OVER A SPECIFIED NUMBER OF SHAFT ROTATIONS

Title (de)

REGELKREISRÜCKMELDUNGSSTEUERUNG DER MOTORDREHZAHL EINES CHIRURGISCHEN KLAMMER- UND SCHNEIDINSTRUMENTS AUF BASIS DER GEMESSENEN ZEIT ÜBER EINE BESTIMMTE ANZAHL AN WELLENUMDREHUNGEN

Title (fr)

COMMANDE DE RÉTROACTION EN BOUCLE FERMÉE DE LA VITESSE D'UN MOTEUR D'UN INSTRUMENT DE DÉCOUPE ET D'AGRAFAGE CHIRURGICAL SUR LA BASE DE LA DURÉE MESURÉE SUR UN NOMBRE SPÉCIFIÉ DE ROTATIONS D'ARBRE

Publication

EP 3417808 A1 20181226 (EN)

Application

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Priority

US 201715628072 A 20170620

Abstract (en)

A motorized surgical instrument is disclosed. The surgical instrument includes a displacement member configured to translate over a plurality of predefined zones. A motor comprising a shaft is coupled to the displacement member. A control circuit is coupled to the motor. A position sensor is coupled to the control circuit to monitor the rotation of the shaft. A timer circuit is coupled to the control circuit. The control circuit is configured to receive rotations of the shaft in a current zone defined by a set rotation interval, measure time at a set position of the rotation interval, wherein the measured time is defined as the time taken by the displacement member to traverse the rotation interval based on a predetermined number of shaft rotations, and set a command velocity of the displacement member for a subsequent zone based on the measured time in the current predefined zone.

IPC 8 full level

A61B 17/072 (2006.01); **A61B 90/00** (2016.01); A61B 17/00 (2006.01)

CPC (source: EP US)

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Designated contracting state (EPC)

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BA ME

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DOCDB simple family (application)

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